The Endorphins

Advances in Biochemical Psychopharmacology, Volume 18

Edited by E. Costa and M. Trabucchi
Raven; New York, 1978
xvii + 379 pages. $36.40

This book comprises the communications presented in a symposium on the endogenous morphine-like peptides, endorphins and enkephalins, held in August 1977. A total of 32 original contributions are reported, which include many different aspects of the then current research on these peptides.

A large part of the book deals with the localisation of the endorphinic and enkephalinergic systems in the central nervous system, and with their relationships with other hormones or neurotransmitters. Immunohistochemical and radioimmunoassay techniques are widely used to show a tentative description of the endorphinic and enkephalinergic pathways, which interestingly are shown not to be related to each other.

On the other hand, a number of contributions in the book deal with the pharmacology of these opioid peptides. The various results concerning the relationships between enkephalins and substance P, the catecholamines, and GABA, will be very helpful to the reader interested in the rôle of these neurotransmitters in the central nervous system. Similarly, a rough picture is presented concerning the function of the pituitary and hypothalamic endorphins.

Interest is also focussed on the opiate receptors. The localisation of these receptors has been carefully studied. Particularly, it is reported that some opiate receptors are located on dopaminergic nerve endings in the striatum, a result important with regard to the complexity of the morphine–dopamine interactions. From a more general point of view, a distribution of the different classes of opiate receptors (μ, K, σ) in the central nervous system is also proposed.

In the last part of the book, the possible functions of enkephalins and endorphins in the pain mechanism as well as in psychiatric disorders are discussed. The reader will be pleased to learn that the opioid peptides, which may be involved in the acupuncture analgesia, offer an elegant explanation to this very ancient and mysterious form of pain relief. Together with these reports, the various behavioural effects of endorphins which are described in the book, suggest that they might be involved in the well-being of mammals.

Due to the considerable amount of research being carried out in this field of great potential importance, some of the results presented are now out of date. Nevertheless, the biochemist or the pharmacologist will certainly appreciate this book, which offers a good grounding in both the enkephalins and the endorphins.

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Conjugation Reactions in Drug Biotransformation

Proceedings of a Symposium held in Turku, Finland, July 23–26, 1978

Edited by A. Aitio
Elsevier/North-Holland; Amsterdam, New York, 1978
x + 530 pages. $76.60, Dfl 157.00

This book contains 43 papers on conjugation reactions together with 36 poster abstracts. Each of the latter is one page in length. The papers are grouped into eight sections, each including a condensed account